Lyon et al. -- Appl. No. 10/057,532

IN THE CLAIMS:

The following listing replaces all prior versions of the claims:

1. (Currently amended) A vaccine comprising a C-terminal 42 kD fragment of merozoite surface protein-1 (MSP-1₄₂) from *P. falciparum* 3D7, SEQ ID NO:2 NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure, and an adjuvant.

2. (Cancelled)

3. (Currently amended) A method for inducing an immune response to malaria in a subject comprising administering to said subject a composition comprising an immunologically effective amount of C-terminal 42 kD fragment of merozoite surface protein-1 (MSP-1₄₂) from *P. falciparum* 3D7, SEQ ID NO:2 NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure in an acceptable diluent, and an adjuvant.

4. (Cancelled)

5. (Currently amended) A method for inducing a protective immune response to malaria in a mammal, comprising

administering a composition comprising a MSP-1₄₂ from *P. falciparum* 3D7, SEQ ID NO:2 NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure in an amount effective to induce an immune response in said mammal, and an adjuvant.

6. (Cancelled)

7. (Original) The method of claim 5, wherein the composition is administered to the individual in an amount of 50 ug per dose.

Lyon et al. -- Appl. No. 10/057,532

- 8. (Original) The method of claim 5, wherein the composition is administered parenterally.
- 9. (Original) The method of claim 5, wherein the composition is administered intranasally.
- 10. (Original) The method of claim 5, wherein said administration is a multiple administration.
- 11. (Original) The method according to claim 10 wherein said multiple administration is at 0 and 6 months.
- 12. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, 50 μ g 3D-MPL, and 50 μ g QS21, consisting of small liposomes, wherein the QS21 and the 3D-MPL are in the membranes of the liposomes.
- 13. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 10.68 mg squalene, 11.86 mg tocopherol, 4.85 mg Tween 80, 50 μ g 3D-MPL, and 50 μ g QS21 and consisting of an oil-in-water emulsion comprising the squalene and alpha-tocopherol, the emulsion being in admixture with the QS21 and 3-DPML.
- 14. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, 50 µg 3D-MPL, 50 µg QS21 and 0.5 mg AlOH₃, said formulation consisting of small liposomes wherein the QS21 and 3D-MPL are in the membranes of the liposomes and wherein the liposomes and the antigen are absorbed onto a metallic salt particle carrier.
- 15. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.5 mg AlOH₃, $500 \mu g$ of unmethylated immunostimulatory oligonucleotide CpG wherein antigen and immunostimulant (CpG) are absorbed onto a metallic salt particle carrier.

Lyon et al. -- Appl. No. 10/057,532

16. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, 50 µg QS21, and 0.5 mg AlOH₃, consisting of small unilamellar vesicles wherein the QS21 is in the membranes of the vesicles and wherein the vesicles and the antigen are absorbed onto a metallic salt particle carrier.